

QP Code: 423006

Reg. No.....

**Fourth Semester B.Pharm Degree Supplementary Examinations
March 2025
Physical Pharmaceutics II
(2017 Scheme)**

Time: 3 Hours

Max. Marks: 75

- *Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space*
- *Answer all parts of a single question together • Leave sufficient space between answers*
- *Draw diagrams wherever necessary*

Essays

(2x10=20)

1. Define order of a chemical reaction. Explain different methods to determine order of a reaction.
2. Define thixotropy. Explain the methods to measure it.

Short Notes

(7x5=35)

3. What is oxidation. Explain different methods to prevent oxidation.
4. Explain different factors influencing settling of particles in suspension.
5. Write the principle and procedure for determination of viscosity by capillary viscometer.
6. Explain plastic and elastic deformation of solids.
7. Explain any four theories of emulsification with suitable examples.
8. Write a note on spreading coefficient.
9. Explain any two Kinetic Properties of Colloids.

Answer Briefly

(10x2=20)

10. Define Molecularity with example.
11. Define Activation Energy.
12. List out multi-point viscometers.
13. What are shear thickening systems. give example.
14. Define Sedimentation volume.
15. What are the factors to be considered for selection of preservatives for emulsions.
16. Define the term Surface tension.
17. Write any four applications of spreading coefficient.
18. Define critical micellar concentration.
19. What is peptization.
